LETTER TO THE EDITOR

Sir,

A 36-year old female who was previously fit and well underwent a cosmetic septorhinoplasty under general anaesthesia. Ten minutes post-operatively she suddenly developed respiratory distress. She was observed to have surgical emphysema from the level of the zygomas down her neck and extending over the upper half of the chest, bilaterally, and had poor air entry. Emergency chest radiograph revealed bilateral pneumothoraces. A chest drain was placed in each side and the patient transferred to the intensive care unit, repeat chest radiograph showed both lungs had re-inflated (Figure 1).

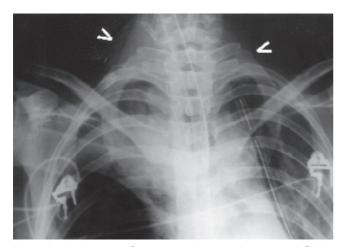


Figure 1. Radiograph of the chest demonstrating lung-re-inflation following the insertion of bilateral chest drains (the left drain is at the base of the pleural cavity and not visible on this view). Note the bilateral emphysema in the neck (arrows).

Broncoscopy was normal and culture of pulmonary lavage revealed *Haemophilus influenzae*. The patient was ventilated for 12 hours, and commenced on CPAP for seven days before she was extubated. She then made an unremarkable recovery and was discharged home ten days after her operation.

Surgical emphysema is a rare but recognised finding following facial trauma (Henry and Hills, 1989), but we can find only two previous reports following cosmetic rhinoplasty (Dubost et al., 1986; Celebioğlu et al., 1998). This case contrasts with the previous reports in that the pneumothoraces occurred almost immediately at the end of surgery and both sides were affected simultaneously, unlike the previous reports where the development of bilateral pneumothoraces occurred much later (several hours post-operatively).

The exact mechanism by which surgical emphysema was produced in this case is uncertain, but previously the possibility of both surgical and anaesthetic causes has been outlined (Dubost et al., 1986). In particular, it has been suggested that surgical emphysema following rhinoplasty could result from the mucosal incisions for the nasal bone osteotomy acting as one-way valves allowing air to be pumped into the subcutaneous tissues (Celebioğlu et al., 1998). This case highlights a rare but serious complication, but the possibility of its development post-operatively should be remembered by all those who undertake rhinoplasty.

July 1998 Peter J. Anderson, MD, FRCS, UK Mazhar Nizam, FRCS, UK

REFERENCES

- Henry CH, Hills EC (1989) Traumatic emphysema of the head and neck and mediastinum associated with maxillofacial trauma: Case report and review. J Oral Maxillofac Surg 47: 876-882
- Dubost J, Kalfon F, Roullit S, Breton P, Bansillon V (1986) Emphysema sous-cutané géant, pneumomédiastin et pneumothorax bilatéral dans les suites d'une rhinoseptoplastie. Cah Anesthesiol 34:161-162
- Celebioğ lu S, Keser A, Ortak T (1998). An unusual complication of rhinoplasty: subcutaneous emphysema. Br J Plast Surg 51: 266-267.

ANNOUNCEMENT